Claims

1. A control system for the compressor of a vehicle air braking system, the control system having one or more inputs indicative of a vehicle operating state, and an output for determining whether a compressor is on-load or off-load, the system further including target means to calculate a target pressure for a reservoir downstream of said compressor, said output being responsive to said target means.

2. A control system as claimed in claim 1 wherein a control system input is the vehicle throttle position.

3. A control system as claimed in claim 2 wherein the target pressure is higher during throttle-off modes than throttle-on modes.

4. A control system according to claim 3 wherein the higher target pressure exceeds the normal target pressure by 8-10%.

5. A control system according to claim 4 and further including a third yet higher target pressure.

6. A control system as claimed in claim 1 wherein a control system input is the temperature at the compressor outlet.

7. A control system as claimed in claim 6 wherein said target pressure is reduced in response to elevated compressor outlet temperature.

8. A control system for the compressor of a vehicle air braking system, the compressor being capable of being taken off load at a predetermined target pressure wherein the control system has an input indicative of vehicle throttle position and is adapted to increase said target pressure at a zero throttle opening.

9. A control system for the compressor of a vehicle air braking system, the control system having a first input for indicating vehicle engine speed, a second input for indicating vehicle speed, a third input for indicating vehicle throttle opening, a fourth input

for indicating air pressure in a reservoir downstream of the compressor, and an output for determining whether a compressor is on-load or off-load, the system further including means to calculate a target pressure for said reservoir, the target pressure being higher during throttle-off modes than during throttle-on modes.

10. A control system according to claim 9 wherein the higher target pressure exceeds the normal target pressure by 8-10%.

11. A control system according to claim 10 and further including a third yet higher target pressure.

12. A control system according to any preceding claim and adapted to provide independent control of said compressor and a purge valve therefor.

13. A method of controlling a compressor of a vehicle air braking system, the method comprising the steps of :

providing a control system for the compressor having one or more inputs indicative of a vehicle operating state,

providing an output from the control system to place the compressor either on-load or off-load depending upon said vehicle operating state,

providing target means to calculate in real time a target pressure for a reservoir downstream of said compressor, wherein said output from the control system is responsive to said target means.